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60,446-244; 03ZFM046
Serial No. 10/808,150

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: DeVore

SERIAL NO.: 10/808,150

FILED: 3/24/2004

GROUP ART: 3681

EXAMINER: Bonck, Rodney H.

FOR: Clutch Assembly With Smooth Engagement

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR RECONSIDERATION

Dear Sir:

In response to the final Office Action of January 5, 2006, applicant requests consideration of the following arguments. Claims 1-16 remain in the application including independent claim 1.

Claims 1-5 stand rejected under 35 U.S.C. 102(b) as being anticipated by Braun (US 4646891). The examiner argues that Braun discloses a first reference point (point of incipient engagement) and a second reference point (point of full engagement) that are determined based on engine and transmission speed.

Claim 1 recites the steps of: (d) determining a first reference point corresponding to a beginning of torque transfer in response to the clutch operational command based on at least data from steps (a) and (b), i.e. monitored speed of engine output shaft and transmission input shaft; (e) determining a second reference point corresponding to a beginning of clutch lockup based on at least data from steps (a) and (b); and (f) determining a clutch engagement rate based

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on the first and second reference points. There is no disclosure in Braun of determining a clutch engagement rate based on the first and second reference points defined in claim 1.

Even if the reference points in Braun can be broadly considered to be "determined" as argued by the examiner, there is no suggestion that a clutch engagement rate is determined based on both of these reference points as defined in the claims. Thus, applicant respectfully asserts that Claims 1-5 are allowable over Braun.

Claims 6-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Braun in view of Otto (US 2002/0096416A1). For the reasons set forth above, Braun does not disclose, suggest or teach the claimed invention. Otto does not make up for the deficiencies of Braun. Further, the examiner relies on Otto to disclose performing a plausibility check, referring to paragraph [0031]. However, the plausibility check specified in Otto does not disclose the features set forth in claim 6.

Claim 6 recites the step of performing a plausibility check to verify at least one of the first reference point, second reference point, or clutch engagement rate. Braun refers to the use of a displacement sensor signal to verify correct operation of the clutch system 10. The displacement sensor 42 is used to detect the displacement of the release piston 24 relative to the release cylinder. See paragraph [0028]. There is no disclosure in Braun of performing a plausibility check to verify reference points and/or clutch engagement rates as defined in claim 6.

Claims 9-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Braun in view of Chan (US 5441462). For the reasons set forth above, Braun does not disclose, suggest or teach the claimed invention. Chan does not make up for the deficiencies of Braun. Further, the examiner has generally indicated that Chan discloses the features of claims 9-11 but has not provided any specific details where these features are disclosed in Chan. Applicant respectfully requests that the examiner provide more detailed arguments indicating where the features of claims 9-11 are disclosed in Chan.

Additionally, the examiner argues Chan discloses selecting between modes of operation and that one of ordinary skill in the art would be motivated to modify Braun with the teachings of Chan to allow the driver to adapt the system to the desired performance. Claims 9-11 do not

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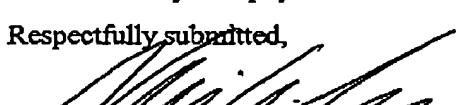
recite any type of driver selection, and thus applicant is unsure as to why this would serve as a motivational basis for modifying Braun.

Claims 12-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Braun in view of Fowler et al. (US 2004/0025617A1). For the reasons set forth above, Braun does not disclose, suggest or teach the claimed invention. Fowler does not make up for the deficiencies of Braun. Further, the examiner argues that Fowler discloses determining parameters such as vehicle weight and road gradient to control a transmission system, however, this general disclosure does not teach the features defined in claim 12. Claim 12 recites the steps of determining drive-off torque and determining associated drive-off torque increase rate for a desired vehicle acceleration prior to initiating a drive-off maneuver. Fowler does not disclose these claimed features.

Claims 15-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Braun in view of Shirley (US 4642770) and further in view of Tellert (US 4509625). For the reasons set forth above, Braun does not disclose, suggest or teach the claimed invention. Shirley and Tellert do not make up for the deficiencies of Braun. Further, claim 15 recites the step of predicting a useful clutch life based on the clutch history. The examiner argues that the teachings in Shirley and Tellert could be used to determine the status of clutch wear, however, neither reference teaches a method for *predicting* useful clutch life. Thus, applicant asserts that claims 15-16 are clearly allowable over the recited references.

Applicant asserts that all claims are in condition for allowance and respectfully requests an indication of such. Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,


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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (571) 273-8300, on March 2, 2006.



Laura Combs